the author tells us in the introduction, with a few changes, a translation of his article which appeared in a recent number of the "Beitrage zur Klinik der Tuberculose."

It would be impossible in the space at the disposal of the reviewer to do justice to a work representing the results of the observations of such a painstaking investigator as Dr. Pottenger in the recognition of intrathoracic inflammations. Certainly when so little is written in English textbooks, and for that matter so little taught in American medical schools, regarding the physical signs of incipient lung tuberculosis, any aids of demonstrated value to the early recognition of this disease must be hailed with gratitude by the profession. A valuable sign has been brought forth by the author in the recognition of muscle spasm and subsequent muscle degeneration. This fact is attested by the experience of the reviewer and others in this country and in Europe, who are daily making use of the sign in diagnosing pulmonary inflammatory conditions. Muscular spasm is defined by the author as "the motor expression of the inflamed lung and we accept it as being produced by the inflammation in the lungs sending impulses through the sympathetic nerve fibers to the cord where they impart to the cells of the segment on the side of the involvement a certain amount of irritability, which shows itself peripherally, through the posterior horn, in changes in sensation as described by Head, and, through the anterior horn as muscular spasm and degeneration as here described." It must be admitted that this definition does not completely explain the phenomenon observed, for the spasm and degeneration does not follow any particular nerve distribution, but rather involves the musculature immediately overlying the diseased area. Where an entire muscle or several muscles are supplied by one nerve, only a part of the muscle or one of the group may be in spasm, while the rest show no change. The irritation seems rather to follow certain fibres of the nerve. Degeneration of muscle, atrophy of the overlying skin, and disappearance of the subcutaneous tissue has been noted by other authorities as evidence of early tuberculosis, but as Pottenger points out, these signs are evidence of chronicity rather than early lesion, as old quiescent foci with renewed activity are too frequently mistaken for incipient lesion.

The chapter on lagging as a sign of apical involvement is interesting in that the author attributes its cause more to the muscular spasm interfering with the free movement of the chest wall, rather than to the presence of infiltration interfering with elasticity of the lung. As lagging is frequently a very early sign when probably there is insufficient infiltration to perceptibly affect the elasticity of the lung, the author's explanation would seem to be the more plausible one. It is to be regretted that the chapter on this important sign is so brief, for it is a sign usually neglected in text books, and, when mentioned, usually confused with limited respiratory excursion—quite another sign.

Flattening of the chest wall on the affected side is also considered by the author to be due to the shortening which takes place in muscles which have undergone prolonged spasm and subsequent degeneration. Schematic drawings are presented to elaborate and elucidate his argument, and the fallacy of the older explanation of flattening, namely, the effect of atmospheric pressure forcing the bony thorax to contract in order to occupy the space formerly occupied by lung tissue which has undergone contraction or destruction, is most convincingly presented.

The last chapter, "Light Touch Palpation," is a discussion on the possibility and practicability of dilimiting normal organs and of diagnosticating diseased conditions in organs by very light palpation. The comparative value of this method with percussion and auscultatory percussion are reviewed. The reviewer believes that examiners generally will be loth to replace percussion by the method of palpation here advanced. Yet it must be admitted that the resistance felt by the percussing finger has gradually assumed relatively greater importance to the careful examiner than the note elicited by the percussion stroke. In other words, percussion has become a method of palpatory percussion. The value of any of the methods for eliciting physical signs is in direct proportion to the skill developed in the examiner by the constant use of his particular methods and certainly Pottenger is to be congratulated on the accuracy of his findings by the method of light touch palpation as he has developed it. While its value in examination of the abdomen has been generally recognized, he has demonstrated its usefulness even through the bony walls of the thorax.

The author has been frank throughout the book in admitting doubtful points. He admits that all his observations are not entirely new, but justly claims that no one heretofore has suggested their diagnostic importance. He has also pointed out that these motor, sensory and trophic changes in the soft parts, and also the trophic changes in the cartilage and bone, have had a great deal to do in changing the shape of the thorax, and particularly producing the phenomena which have been pointed out by Freund as being predisposing causes of tuberculosis.

The cuts illustrating the text are excellent reproductions from Spalteholz. The book is well printed, the arguments are clearly and logically set forth, and will be read with profit by all who wish to improve their methods of physical diagnosis.

G. H. E.

APPRECIATION OF THE TELEPHONE.

Tinkle, tinkle, little bell—
How I wish you safe in h--l!
Central on the job all night,
Doctor sleeping sound and tight.
"Baby's got the stomach ache,"
Mama shaking like a quake;
Papa running here and there,
Barks his shins upon a chair!
Doctor scooting through the air;
Lights go out; gas all gone;
Motor dead a mile from home;
Doctor cussing like a fiend
Baby, motor, gasoline!!
(He arrives.)
Baby sleeping in his bed;
Papa's arm round mama's head.
Nothing happened after all!
Doctor on a useless call!
Tinkle, tinkle little bell!
I don't hear you. Go to h--l!

—Robert B. Dempsey.

SANITARY SCIENCE AT TULANE UNIVERSITY, NEW ORLEANS, LA.

By W. H. P. CREIGHTON, Dean College of Technology.

Three series of courses in Sanitary Science were started at Tulane this session. These courses are for medical, science and engineering students specializing in sanitation. The medical graduate in this course expects to become the health officer on Boards of Health; the science graduate becomes the expert on sanitary biology, and the engineering graduate will eventually design, build and care for structures for sanitary purposes.

To give courses in sanitary engineering, a university must have departments in medicine and engineering on one campus. Many universities either have no medical department or that department is located in some distant city. Tulane is fortunate